

Commander, Operational Test and Evaluation Force



Operational Testing of ECDIS-N Systems

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Overview

- **Operational testing process**
- **Navigation Sensor System Interface (NAVSSI) Lite**
- **Voyage Management System (VMS)**
- **Integrated Bridge System (IBS)**
- **Recommendations**



Operational Testing Process

- **Documents:**
 - **Operational Requirements Document (ORD) identifies system specific performance requirements.**
 - **Test and Evaluation Master Plan (TEMP) outlines a logical sequence of developmental and operational testing.**
 - **Test Plan details how a particular test phase will be conducted and evaluated.**
 - **Final Report summarizes test results, draws conclusions on operational effectiveness & suitability, and makes a recommendation regarding fleet introduction.**



Operational Testing Process

- **Typical testing timeline:**
 - **TEMP approximately 120-180 days but can be accelerated.**
 - **TEST PLAN NLT 30 days before test.**
 - **Operational Test Readiness Review (OTRR) approximately 30 days after TECHEVAL report published and 30 days prior to commencement of OPEVAL.**
 - **OPEVAL requires approximately 30-60 days.**
 - **Test Report NLT 90 days after OPEVAL completed.**



Operational Testing Process

- **What COTF can do:**
 - **Work closely and early-on with ALCONed to achieve a successful operational test.**
 - **Start drafting TEMP based on a draft ORD.**
 - **Provide a quick look report approximately 30 days after test if directed by CNO.**
 - **Determine operational effectiveness and operational suitability.**
- **What COTF cannot do:**
 - **Draft a TEMP without a requirements document.**
 - **Draft a TEMP or test plan without a CONOPS.**
 - **NAVCERT.**
 - **CREWCERT.**



OPEVAL Concerns

- **Nav team augmentation for OPEVAL**
- **Training and Navigation Proficiency**
- **Platform(s) selection and scheduling**
- **Suitability COIs equally important as effectiveness**
- **Scope of backup system testing**
- **Single points of failure**



NAVSSI Lite

- **OPNAV N633 to provide requirements clarification letter NLT SEP01 to support near-term FY02 goals. Long-term solution is to incorporate ECDIS-N requirements in the NAVSSI ORD currently under revision.**
- **Program Manger and COMOPTEVFOR to provide TEMP NLT DEC01.**
- **TECHEVAL JAN-FEB02**



NAVSSI Lite

- **OTRR MAR02**
- **OPEVAL APR-MAY02**
- **Final Test Report NLT AUG02**



VMS

- **Schedule risk**
- **TEMP**
- **Fleet directives (CONOPS)**



IBS Issues

- **ECDIS-N certification requirement is part of CG Smartship ORD .**
- **ORD clarification required for system definition and applicable testable parameters.**
- **No other Smart technology programs/ORDs exist.**
- **No DT testing completed or planned to date for ECDIS-N requirements.**



Recommendations

- **Appropriate TYCOM provide CONOPS.**
- **Specify single adjudication authority for OPNAVINST 9420.2 requirement issues (N096 or N763)**